

Issue Paper

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CLEANING UP MICHIGAN: HOW IT WORKS AND WHAT IT COSTS

by

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THE SENATE FISCAL AGENCY

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INTRODUCTION

Michigan's strong history of industrialization has left the State with many polluted and contaminated sites. Many of these are cases where the responsible party has gone out of business, does not have sufficient resources to pay for cleanup activities, or cannot be proved to be liable. In such cases, State funding remains the only possibility for the site to be made safe from whatever harmful pollutants it may contain.

While the last 20 years have seen a great many of these sites cleaned up to a point where they can be re-used for industrial, commercial, or residential purposes, thousands more contaminated sites have been identified but not addressed. Due to the current lack of funding, only the most high-priority sites can be attended to today.

State funding for environmental cleanup sites comes from a variety of mechanisms. General obligation bonds have been the most reliable way for the State to support environmental cleanup projects, and a significant portion of these projects over the past 20 years has been made possible by the two large general obligation bonds approved by voters in 1988 and 1998. With only two exceptions, other fund sources have one-time, short-term, or irregular revenue streams that are not dependable in the long term. There are two programs now in place to maintain a measure of steady revenue. From fiscal year (FY) 1996-97 to FY 2001-02, appropriations were provided from the General Fund to help fund cleanup sites. Some Federal funding has come in for Superfund sites or by way of one-time Federal tax credits.

BONDING

General obligation bonds have been an important source of funding for the cleanup of contaminated sites in Michigan. Bonds tend to be flexible in their application, and have supplied a majority of cleanup project funding over the past 20 years. In 1988, the voters of the State approved the Environmental Protection Bond Fund, providing \$660.0 million total with \$425.0 million designated for cleanup activities. Ten years later, in 1998, the voters of the State approved another general obligation bond called the Clean Michigan Initiative (CMI). This bond provided a total of \$675.0 million, of which \$335.0 million was earmarked to clean up contaminated sites.

One advantage of bond funding is the budgetary flexibility it allows. Administrators are able to plan years in advance, knowing they have guaranteed bond money. Bond revenue also gives immediate relief if there is an overwhelming amount of cleanup needs. However, a downside of bonding is the uncertainty of when the next bond may be approved. Since bonds were passed in 1988 and 1998, the adoption of a similar bond in 2008 would have followed the pattern. As early as 2005, however, the Department of Environmental Quality (DEQ) had to begin preparing for the possibility that a new bond would not be approved in 2008. To ensure that funds would remain for emergency cleanup situations, it implemented significant spending cutbacks in the program. Another disadvantage of bond funding is the constant need to fund the debt service. Although General Fund money usually is used for debt service, State restricted fund sources primarily used for cleanup activities occasionally have been appropriated for this purpose.

ONGOING SOURCES OF FUNDING

Refined Petroleum Fund

A fairly reliable source of funding for cleanup sites is the Refined Petroleum Fund (RPF), which receives funding from a 7/8 cent-per-gallon regulatory fee on refined petroleum products sold in Michigan. Pursuant to statute, revenue derived from the fee is used for cleanup projects, debt

service on cleanup bonds, administration and program staff costs, and gasoline inspection programs. Only cleanup projects involving petroleum-related contaminants can receive RPF funding; these are usually leaking underground storage tank (LUST) sites.

When the Fund was established in October 2004, it was estimated that the RPF would receive around \$60.0 million annually. However, as demand for gasoline declined with the rising cost of transportation, total RPF revenue fell to \$58.1 million in 2006, and \$55.0 million in 2007 when Michigan gasoline consumption fell by 4.0% (according to the Michigan Department of Labor and Economic Growth). With gasoline demand continuing to drop in 2008, RPF revenue is expected to decline to around \$53.0 million, according to DEQ projections. Declines in RPF revenue may lead to a reduction in petroleum-related cleanup projects, depending on how budgets are adjusted for the revenue loss.

Cleanup and Redevelopment Fund

Another annual source of support for cleanup activity is the Cleanup and Redevelopment Fund (CRF). This Fund receives its revenue from unclaimed bottle deposits. The CRF is allocated 80% of the DEQ's unclaimed bottle deposit funds. The remainder goes toward pollution prevention activities and a long-term trust fund set aside for cleanup activities. Initially, CRF money was used to open new cleanup sites, but with the CMI bond money running out, the CRF has been refocused and primarily used for oversight of existing sites. This Fund's revenue has averaged \$9.6 million since 1997, but has varied wildly. Revenue dropped from \$14.4 million in 2001 to \$6.5 million in 2005. A leading theory for this dramatic decrease is an increase in the number of returnable bottles and cans that are bought out of State and redeemed in Michigan. Bringing these bottles across the State line for the "refund" of a deposit not only is unlawful, but also deprives Michigan of funding for environmental cleanups. Department officials, lawmakers, and retailers are working together to address the problem.

OTHER FUNDING SOURCES

General Fund

During a five-year span from FY 1996-97 to FY 2001-02, \$115.9 million was appropriated from the General Fund to support cleanup projects. In FY 2002-03, with the apparent strength of CMI bond funding and a tight State budget, General Fund support was eliminated from cleanup funding. Four years later, in FY 2006-07, \$2.3 million was appropriated once again from the General Fund for administration of cleanup projects, and \$2.1 million likewise was appropriated in each of FY 2007-08 and FY 2008-09.

Environmental Protection Fund

The Environmental Protection Fund (EPF) was created in 1994 to receive revenue from the sale of Federal tax credits under Section 29 of the Internal Revenue Code. The EPF received one-time revenue of \$39.4 million over several years; this money was used to conduct cleanup activities at additional sites. In general, DEQ selected sites that could be completed in three years or less with EPF funding so that other funds would not have to pay to finish work at EPF-funded sites once the sale of the tax credits was complete and the EPF was receiving no more revenue. Since both the CMI bond and the EPF revenue stream began running out, EPF funds have been shifted toward program administration and staffing, and activity on EPF-funded sites has been trimmed.

In FY 2005-06, \$19.0 million was transferred into the EPF from the Community Pollution Prevention Fund and the Cleanup and Redevelopment Trust Fund, both of which receive revenue from unclaimed bottle deposits along with the CRF. This transfer was used for administration of EPF-funded sites in progress, as well as other DEQ staffing. The EPF has no

source of income other than interest on its current balance, and DEQ officials estimate that the \$9.9 million balance will be completely spent by 2010.

Environmental Response Fund

The Environmental Response Fund (ERF) receives revenue from cost-recovery litigation. When a contaminated site requires timely action, the State will fund the necessary activities and seek reimbursement later, since the cost-recovery process often can take months or even years. If the State can prove a party was responsible for the contaminated site, then any reimbursement from the party is deposited into the ERF. Funds in the ERF are used first to reimburse the Attorney General's office for its work in the cost-recovery process. The remaining revenue is used for future emergency cleanup responses, staff oversight of these sites, and State matching funds for Federal Superfund sites. Revenue for the ERF has varied widely, producing an average of \$8.0 million per year recovered over the last five years.

Settlement Fund

The DEQ assesses fines and fees on people who violate State laws involving air quality, water, land, waste, and hazardous materials. The revenue from these assessments is deposited into the Settlement Fund. While revenue varies, the Fund has accrued an average of \$3.3 million over the last five years. Settlement Fund revenue has been primarily used in this program for DEQ staffing costs.

Federal Superfund

Since it was created by law in 1980, the Federal Superfund program has spent more than \$853.0 million (including \$32.0 million in State funding from the Emergency Response Fund) on 82 cleanup sites in the State of Michigan. The Superfund program is used to clean hazardous waste sites. Potential sites are placed on a national priority list, based on the severity of the site.

CLEANUP PROCESS

Just as there are many different types of cleanup funds, there are many different types of cleanup projects. Also, just as each project is different, so is the process for discovering, cleaning, and closing the site. What follows is a summary of how sites are identified, operated, prioritized, and funded.

Discovery

Reporting of a potential contamination that may lead to a State-funded cleanup can come in a variety of ways. One is an event, such as a tanker spill, or a factory explosion. Events are usually the easiest to identify and typically receive quick responses.

Other times, private citizens report observations of what they suspect may be dangerous to the local environment. These reports might involve, for example, unusual smells, questionable-tasting drinking water, or waste found in rivers or by the roadside. The DEQ receives most of these calls through its Pollution Emergency Alert System (PEAS). Citizens are encouraged to dial the Department's toll-free number (800-926-4706) to report a possible contamination. While some of these calls do not lead to the discovery of an actual environmental danger, the system has been effective in identifying many health threats and cleanup needs.

In cases involving leaking underground storage tanks, site reporting most often comes from tank owners themselves. Orphan sites, such as a gas station that has gone out of business, can be especially difficult to identify if they have been neglected for a long time. Damage at such sites gets worse with time, as petroleum products spread and often head toward groundwater.

Site Operations

The DEQ retains 255 employees in the Remediation and Redevelopment Division (RRD), who oversee cleanup projects at contaminated sites. Oversight involves planning and budgeting for a cleanup, as well as providing on-site advice to the private contractors. Of the 255 RRD employees, 106 are designated as field staff. Field staff can be environmental scientists, engineers, or geologists. They are in charge of responding to and analyzing possible contaminations. With fewer cleanups in operation because of funding shortfalls, many field staff employees have been shifted to other responsibilities, such as liable party oversight, redevelopment support, and compliance and enforcement activities. Another example of a field staff employee is a project manager, who provides oversight of a cleanup site. Compared with past practice, project managers now give more on-site time and personal attention to projects, since there are fewer cases to manage at once.

Sometimes a private corporation will voluntarily inform the RRD of possible contamination on its site and seek advice for cleanup. In many such cases, the company will hire a contractor and conduct the entire operation privately. Companies are looking for advice on what is generally expected of them, but in these cases of self-reporting, the RRD does not often follow up and inspect sites after private cleanup projects have been completed.

Funding Liability and RRD Support

Michigan is unique among the 50 states in the way in which liability for contamination is determined. In most other states, the owner of the contaminated property is responsible for funding the cleanup. Michigan used to follow this policy as well, but in 1995 Michigan changed its law, so that only the responsible party must pay for the removal of contamination. This was seen as a fairer approach to cleanup funding in some respects. However, as a result of this policy change, the State often has difficulty recovering costs of cleanup work. This is because the State must take legal action through the Attorney General to prove in court that a party is responsible for the contamination in question. If the State cannot prove the party's responsibility, the site will become an "orphan site", and any cleanup actions must be State-funded.

Even if the State can prove a party responsible, the defendant might not be able to afford to pay the damages. Again, in such a case, the cleanup becomes the responsibility of the State. Because of this unique policy, the State incurs much greater environmental cleanup costs than it would otherwise.

When a resident purchases property that might have contamination present, he or she has the option to have the DEQ certify a baseline environmental assessment (BEA). This involves an examination of the property, which can be administered by DEQ field staff, to evaluate the levels of contamination prior to purchase. Having a BEA performed and certified by the DEQ establishes what contamination, if any, already existed on the property before purchase, to protect the new owner from liability for any pre-existing pollution. A BEA costs \$750, which DEQ officials indicate is far less than the cost of conducting the examination. The revenue is deposited into the Environmental Response Fund.

Staff in the RRD also provide free support and analysis for private corporations looking to reduce pollution and establish more environmentally friendly systems. This is one of the roles staff are spending more time on since there are fewer cleanup sites to oversee.

How Sites Receive Cleanup Funding

Several factors determine which sites will receive State funding, and in what order. For instance, not only the cost of cleanup but also the potential source of funding plays a role in whether a site will get the funding to be cleaned up. Despite any issues involving funding

availability, any immediate threat to humans, such as drinking water contamination or potential methane fire hazard, would cause a site to be listed as a top priority and be acted upon quickly. Sites that qualify for Federal Superfund dollars are very likely to receive funding, since the State will have to pay for only part of the cleanup in such cases. Likewise, a leaking underground storage tank site is more likely to receive funding than a non-LUST site because many of them involve petroleum and the amount of Refined Petroleum Fund money available for appropriation is larger than other funding sources. A site is also more likely to receive funding if a small amount of money can sustain a much larger past investment. Sites with higher potential for development have received greater priority in past years, but given the current funding shortage, officials have placed less priority on redevelopment in order to ensure availability of funding for urgent sites.

In 2005, the DEQ significantly revised its priority ranking system for potential cleanup sites. When a site has been identified and reported to the DEQ, the staff must assess what priority level to assign to the site, given the limited resources available for cleanup projects. Sites are marked with a priority level of 1 to 5, with a score of 1 indicating the highest priority for cleanup.

A priority 1 designation usually indicates an immediate risk to humans, or a site with greater funding potential, such as one receiving Superfund dollars. A typical priority 2 site would be one where an area is proven to be contaminated, but not yet at a level of "unacceptable exposure" to humans. Priority 2 sites also would usually require State funding.

In past years, the Department has taken action on sites that would score 1 or 2, with an occasional priority 3 site. However, given the declining availability of funds, cleanup operations are currently being performed only on sites rated as priority level 1. Even in these cases where the DEQ takes action, the goal of cleanup projects has shifted to one of "risk reduction" rather than complete cleanup and closure of a site. This is because some sites require five or more years and millions of dollars to be considered "closed" due to cleanup actions. Given the uncertain future of cleanup project funding, the DEQ is trying to avoid committing large sums to long-term projects.

PRESENT STATE OF FUNDS

The backlog of contaminated sites increases every year since the CMI bond money began running out. The CMI has \$54.6 million already appropriated for current sites, but no real funding capabilities for new projects. Of the original \$335.0 million of the CMI bond designated for environmental cleanup projects, only \$55,601 is left to be appropriated. The two sources that receive annual revenue, the Cleanup and Redevelopment Fund and the Refined Petroleum Fund, have dedicated funding to designated sites and staffing costs beyond their current appropriations, as shown by the negative unencumbered values in [Table 1](#).

Table 1

Estimated Cleanup Project Funding, as of FY 2007-08 (in millions)			
	<u>Unappropriated</u>	<u>Appropriated</u>	
	Cash Balance	Encumbered Funding	Unencumbered Funding
Clean Michigan Initiative	\$0.0	\$28.8	\$25.8
Refined Petroleum Fund	\$29.1	\$38.0	(\$8.9)
Cleanup and Redevelopment Fund	\$16.1	\$23.4	(\$7.3)
Environmental Protection Fund	\$10.1	\$ 0.3	\$ 9.9
Environmental Response Fund	\$ 9.5	\$ 0.0	\$ 9.5
Settlement Fund	<u>\$0.0</u>	<u>\$ 0.0</u>	<u>\$ 0.0</u>
TOTAL	\$64.8	\$90.5	\$29.0

Source: Department of Environmental Quality

Appropriations are made based on a submitted list of work sites, but appropriated funds are considered encumbered, or committed to a specific site, only when a clear site plan has been established for a given site. Funding that is appropriated in one fiscal year may go toward work that will last for years to come and, as a result, total appropriations for cleanups can vary from year to year, as shown in [Table 2](#). New appropriations have declined sharply, however, and will continue to do so until additional funding is found.

Given the lack of incoming revenue and the continuing need to pay staffing and administration costs, no new cleanup sites are being added except in the case of an emergency, or if funded by the RPF, as shown in [Table 2](#) for FY 2008-09 appropriations. Many current projects are being closed down or scaled back to reflect the declining availability of funding.

Table 2

Remediation and Redevelopment Division FY 2001-02 to FY 2008-09 Appropriations History							
	Staff/Admin.	Emergency Cleanups Actions	Other Enviro. Projects	CMI Bond Projects	Enviro. Protection Bond Projects	RPF Projects	Total Approps.
FY 2001-02	\$20,702,500	\$4,000,000	\$20,132,200	\$35,720,000			\$80,554,700
FY 2002-03	19,628,300	4,000,000	21,715,000				23,628,300
FY 2003-04	19,957,900	8,370,200	3,239,000	27,358,800			58,925,900
FY 2004-05	20,884,800	4,000,000		37,618,000			62,502,800
FY 2005-06	21,702,200	4,000,000				\$32,000,000	57,702,200
FY 2006-07	21,378,500	4,000,000		5,600,000	\$15,500,000	22,000,000	68,478,500
FY 2007-08	22,924,100	4,000,000		5,663,200		20,000,000	52,587,300
FY 2008-09	23,005,400	4,000,000				20,000,000	47,005,400

Source: Annual Appropriations Acts

FUNDING NEEDS GOING FORWARD

While funding is determined through the appropriations process, DEQ officials estimate funding needs for the leaking underground storage tank program at \$177.0 million per year. According to the DEQ, there are more than 4,500 orphan LUST sites that require State action. Leaking underground storage tank cleanups are funded solely from RPF revenue. The RPF is expected to receive approximately \$53.0 million in FY 2008-09, \$26.8 million of which is dedicated to cleanup projects and staffing, according to enacted appropriations. Even though LUST cleanup projects are better funded than non-LUST projects, the future of LUST funding remains uncertain, as the 7/8 cent-per-gallon fee that is the sole revenue stream to the RPF sunsets on December 31, 2010.

Officials from the DEQ estimate their future needs for staffing and project funding of non-LUST sites at \$85.0 million per year, which is significantly higher than current appropriated levels. With CMI bond money dwindling rapidly, potential revenue to support non-LUST funding (including revenue from the CRF, ERF, General Fund, and Settlement Fund) will be around \$22.2 million annually going forward (as shown in [Table 3](#)), which may not be enough even to pay for staffing and emergency cleanup actions. The difference will be made up with the cash balances available in cleanup-dedicated funds, which are shown in [Table 1](#).

[Table 3](#) illustrates the impending funding problem: appropriations that are greater than revenue. The State restricted funds that support non-LUST cleanup sites receive less revenue than is appropriated from them. As shown in [Table 2](#), CMI bond money has funded the only new non-LUST sites started since FY 2004-05, with the exception of \$15.5 million that had lapsed from the 1988 Environmental Protection Bond. With both bonds now effectively out of funds for

future appropriations, the DEQ will not be able to open any non-LUST cleanup sites except in the case of an emergency.

Table 3

Estimated Annual Revenue for Non-LUST Cleanup Funds (in millions)			
	Potential Revenue for non-LUST Projects	FY 2008-09 RRD Appropriations	Difference
Settlement Fund	\$ 3.2 ^a	\$ 1.5	\$1.7
Cleanup and Redevelopment Fund	\$ 8.8 ^a	\$12.4	(\$3.6)
Environmental Protection Fund	0.0	\$ 3.9	(\$3.9)
Environmental Response Fund	\$ 8.1 ^a	\$ 5.2	\$2.9
General Fund	<u>\$ 2.1^b</u>	<u>\$ 2.1</u>	<u>\$0.0</u>
Total	\$22.2	\$25.1	(\$2.9)

^a Based on a five-year average.

^b Assuming appropriations remain consistent with the last three years.

Source: Department of Environmental Quality and Annual Appropriations Act

CONCLUSION

The DEQ has scaled back work on current sites and is trying to protect prior investments and limit human exposure. In addition, the DEQ does not have funding to conduct new cleanups, and is struggling to continue oversight of existing projects. Currently, the only new project sites are petroleum-related LUST sites, or sites opened as a limited response to an emergency. If trends persist, the State's ability to perform emergency cleanup projects will be even more limited. While there are some steady revenue sources dedicated to environmental response, the funding is only about enough to cover staffing costs, leaving nothing to engage in new cleanup projects.

If the DEQ is to bring the amount of cleanup activities closer to their previous levels, the State will have to find more funding. Legislation was introduced to put a \$1.3 billion environmental bond on the 2008 ballot, but no action was taken on the bill. Discussion of a new bond proposal was postponed until 2010. There are a number of possible solutions to the funding shortage. Michigan's environmental cleanup needs could be addressed through issuance of a new bond, creation of an ongoing revenue stream (such as to the revenue dedicated to the Cleanup and Redevelopment Fund), creation of an ongoing fee (such as the fee that supports the Refined Petroleum Fund), or a combination of these options.